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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/418,628	10/15/1999	TERRY L. WILLIAMS	6785-109	9136

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EXAMINER

DAVIS, TEMICA M

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 05/08/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/418,628

Applicant(s)
Williams

Examiner
Temica M. Davis

Art Unit
2681



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 26, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2681

DETAILED ACTION

Reassignment Affecting Application Location

1. The art unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to art unit 2681.

Response to Amendment

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

3. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2681

5. Claims 1 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 1 and 8 recite the limitation "each said CP" in line 5. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, the examiner will interpret "each said CP" as the base transceivers located in the base station.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5, 7-12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen et al (Haartsen) in view of Carney et al (Carney), U.S. Patent No. 5,970,410.

Regarding claims 1 and 8, Haartsen discloses a method and inherent means for determining a number of pooled available channel processor resources which are unused in a broadband base station (col. 4, lines 27-31, col. 7, lines 17-26 and col. 7, line 65-col. 8, line 13), said base station supporting a cell (col. 5, lines 55-64), channel processors processing any of a

Art Unit: 2681

plurality of traffic channels contained on any frequency channel assigned to said base station (col. 5, lines 55-64); in response to notification of a call originating from or to a subscriber in the cell, determining if said number of available CP resources of said base station is at least one (col. 8, line 59-col. 9, line 5); selecting any of said available CP resources for processing of said call and assigning said call to said available CP resource which has been selected (col. 8, lines 2-6).

Haartsen, however, fails to specifically disclose wherein the broadband base station supports a plurality of cells.

In a similar field of endeavor, Carney discloses a cellular system using in-band translators to enable efficient deployment of high capacity base transceivers systems.

Carney further discloses wherein a broadband base station supports a plurality of cells (col. 3, lines 8-18).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Haartsen with the broadband base station of Carney for the purpose of reducing the number of base stations in the cellular system thereby producing a cost-efficient system (Carney, col. 2, lines 50-58 and col. 3, lines 11-14).

Regarding claims 2 and 9, the combination of Haartsen and Carney discloses the method/means according to claims 1 and 8 and further discloses decrementing the number of available CP resources by one after said assigning step as evidenced by the fact a database is maintained to track channel availability (Haartsen, col. 8, lines 59-62).

Art Unit: 2681

Regarding claims 3 and 10, the combination of Haartsen and Carney discloses the method/means according to claims 1 and 8 and further discloses the step of rejecting said call if all CP resources of said BBS are in use (Haartsen, col. 8, lines 14-20).

Regarding claims 4 and 11, the combination of Haartsen and Carney discloses method/means of claims 3 and 10 as described above. The combination however, fails to disclose incrementing a count of rejected calls each time a call is rejected for lack of sufficient available CP resources.

The examiner contends that such a feature is well known in the art and the examiner takes official notice as such.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Haartsen and Carney with counting the amount of rejected calls in the system due to lack of resources for the purpose of maintaining a record of system usage in order to help in determining if resources should be added to the system in order to service the amount of call traffic the system receives.

Regarding claims 5 and 12, the combination of Haartsen and Carney discloses the method/means according to claims 1 and 8 and further discloses wherein the number of available CP resources is inherently determined by counting the total number of CP resources assigned to the BBS (pre-allocated pooled channels) (col. 7, lines 17-36) and inherently decrementing said total number by at least one of , a total number of active subscriber calls in the BBS and the

Art Unit: 2681

number of CP resources assigned for handling control channel traffic in said BBS as evidenced by the fact that a database keeps track of channel availability (col. 8, line 59-col. 9, line 5).

Regarding claims 7 and 14, the combination of Haartsen and Carney discloses the method/means according to claim 1 as described above. The combination, however, fails to disclose handing over said call from first cell of the BBS to a target cell of the BSS and continuing to process the call on said available resource which has been selected and assigned prior to the step of handing over the call to the target cell.

The examiner contends, however, that such a handoff method is well known in the art, and the examiner takes official notice as such.

Regarding claims 15 and 16, the combination of Haartsen and Carney discloses the method/means of claims 1 and 8, wherein said BBS is a sectorized BBS, said sectorized BBS supporting a plurality of sectors (Carney, col. 3, lines 48-52 and col. 8, lines 37-51; figures 5-7).

Regarding claim 17, the combination of Haartsen and Carney discloses the system of claim 16 and further discloses wherein said BBS comprises a plurality of broadband transceivers (Carney, col. 2, lines 50-54).

Therefore, at the time of invention, since it is known in the art that mobile stations move or travel across different geographical cells, it would have been obvious to a person of ordinary skill in the art to modify the combination of Haartsen and Carney with the well known handoff method in order to maintain the present call connection.

Art Unit: 2681

9. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen and Carney as applied to claims 1 and 8 above, and further in view of Bender et al (Bender), U.S. Patent No. 6,366,779.

Regarding claims 6 and 13, the combination of Haartsen and Carney discloses the method/means according to claims 1 and 8 as described. The combination, however, fails to specifically disclose the step of incrementing the number of available CP resources in said cell when said call is terminated.

In a similar field of endeavor, Bender discloses rapid assignment of a traffic channel in a cellular communications system.

Bender further discloses incrementing the number of available CP resources in a cell when a call is terminated (col. 3, lines 54-64).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the combination of Haartsen and Carney with the teachings of Bender for the purpose of improving system capacity by allowing other users of the system to use channels which are no longer being used.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2681

Diekelman et al, U.S. Patent No. 5,555,444, discloses predictive operation of a communication system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Temica M. Davis whose telephone number is (703) 306-5837. The examiner can normally be reached on Monday-Thursday from 8:30 am to 6:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached on (703) 305-4778.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service whose telephone number is (703)306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for any communications intended for entry).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



Temica M. Davis

May 5, 2003

JEAN GELIN
PATENT EXAMINER

